ABSTRACT OF THE DISCLOSURE

A neurofuzzy device is described that provides a fuzzy logic based user-machine interface for optimal fitting of programmable hearing prosthesis using a neural network that generates targets to be matched by the hearing prosthesis based on individual audiometric and other relevant data to the specific impairment and on the neural network accumulated learning from previous successful fittings. The incorporated learning process can occur on or off line and implements fitting rationales that can satisfy the needs of a general or specific clientele. The parameters of the programmable prosthetic device are set as a group in order to achieve optimal matching to the targets. The user-machine interface realized by a fuzzy logic system deciphers the commends/responses of the user while listening to various stimuli and modifies the targets accordingly thus, providing a closed loop system for in-situ interactive fitting.

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